

MACKIE®
INDUSTRIAL™

MONITOR MR3STK/SWTK

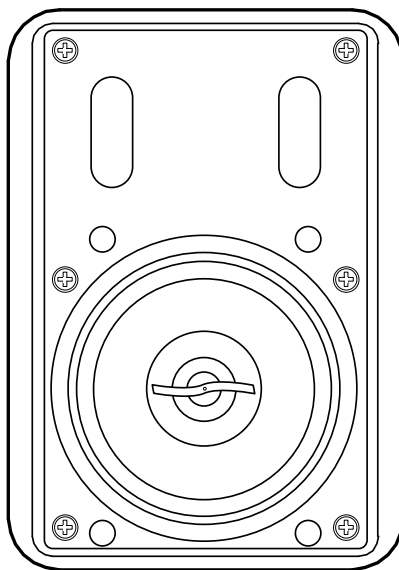
Compact Coaxial Speaker

Quick-Start Guide

The MR3STK (Black) and MR3SWTK (White) are a compact two-way coaxial speaker system featuring a built-in multi-tap constant voltage transformer, with two detented rotary switches for selecting wattage taps (constant voltage) or 4Ω (constant impedance) operation. The 4.75" carbon fiber woofer, in combination with a coaxial 0.5" titanium metalized dome tweeter, provide natural, smooth sound reproduction, ideal for use in business music systems and indoor/outdoor background music applications.

The passive crossover is designed to reduce heat dissipation and optimize the power response of the loudspeaker. Connections are made to recessed, color-coded spring-loaded terminals.

The enclosure is constructed of high-density polystyrene, with integrated mounting points for use with the optional mounting hardware, and includes a protective perforated steel grille.



Safety First!

Before connecting and using the equipment, please read this Quick-Start Guide carefully and keep it for future reference.

WARNING! This equipment has been designed to be installed by qualified professionals only! There are many factors to be considered when installing professional sound reinforcement systems, including mechanical and electrical considerations, as well as acoustic coverage and performance. Mackie Industrial strongly recommends that this equipment be installed only by a professional sound installer or contractor.

1. Attention to the precautions – Always follow the precautions provided on this Mackie Industrial product and in the instruction manual.

2. Water and humidity – Do not use this Mackie Industrial product near water; for example, in the vicinity of a bath tub or sink, in a damp cellar, near a swimming pool, etc..

3. Foreign bodies and liquids – Be careful not to allow any foreign bodies or liquids to get into this Mackie Industrial product.

4. Technical service – The user should never attempt to make any repairs on this Mackie Industrial product unless otherwise indicated in the instruction manual. All repairs should be made by qualified service technicians.

5. Installation – Do not install this Mackie Industrial product in any way that is not provided for in the instruction manual.

6. Stacking multiple units – To prevent the danger of falling equipment, never stack multiple units of this Mackie Industrial product unless this possibility is expressly indicated in the instructions.

7. Respect the safety standards – The entire sound system must be designed in compliance with the current standards and laws regarding electrical systems.

8. Specifications – When installing and using this Mackie Industrial product, keep in mind the technical specifications indicated in the dedicated section of the manual.

9. Accessories – Install and use this Mackie Industrial product only with the accessories specified by the manufacturer or supplied with the product.

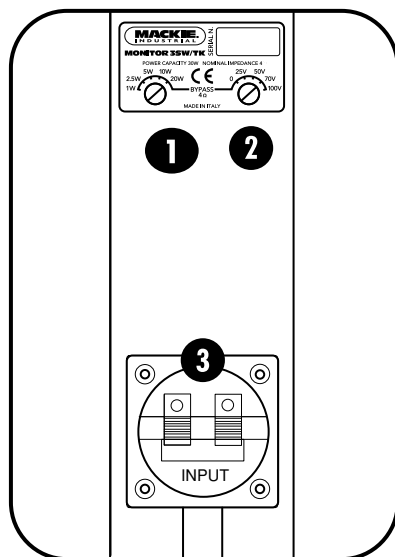
Hearing loss - Exposure to high sound levels can cause permanent hearing loss. The sound pressure level which leads to hearing loss varies considerably from one person to another, and depends on the duration of exposure. The U.S. Government's Occupational Safety and Health Administration (OSHA) has established the maximum sound pressure levels that can be with stood without causing damage, which are shown in the table

below. According to the OSHA regulations, any exposure over the maximum limits indicated in the table can reduce the hearing capacity of a person. To prevent potentially dangerous exposure to high sound pressure levels, anyone subjected to such levels must use suitable protection. When a Mackie Industrial product capable of producing high sound levels is being used, it is therefore necessary to wear ear plugs or protective earphones when the limits shown in the table are exceeded.

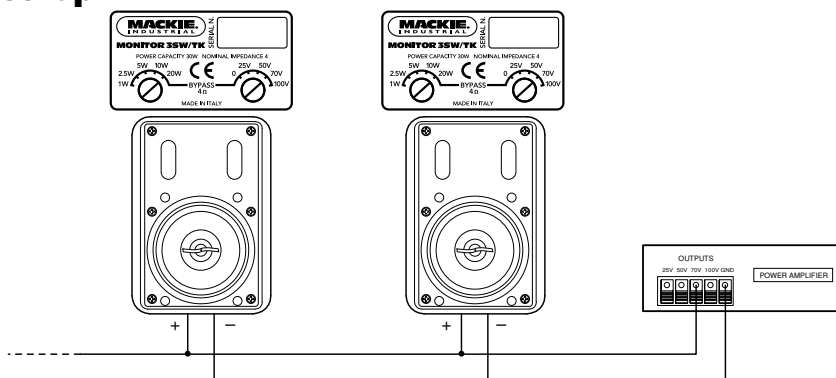
Consult the specifications provided in the instruction manual to know the maximum sound pressure (SPL) the speaker is capable of producing.

Duration per day (hours)	Sound level (dBA)	Typical example
8	90	Duo in a small club
6	92	
4	95	Subway train
3	97	
2	100	Very loud classical music
1.5	102	
1	105	Locomotive at 50 feet
0.5	110	
0.25 or less	115	Loudest parts at a rock concert

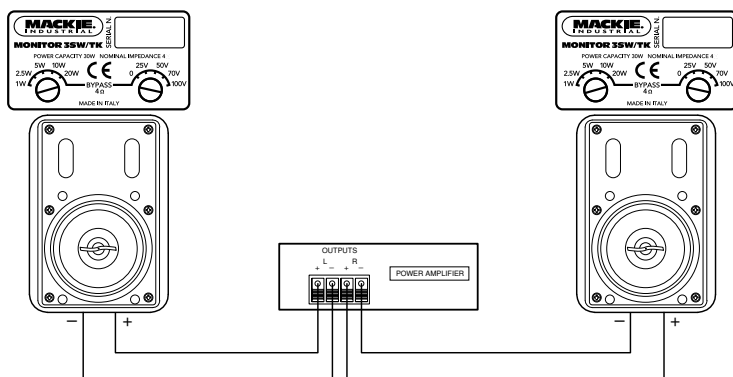




Hookup



70V Connection



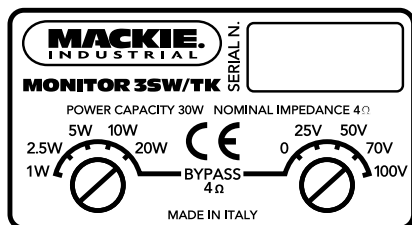
4 Ohm Stereo Connection

Rear Panel Features and Controls

1. This rotary control selects the power tap for the internal constant voltage transformer. Choices are 1W, 2.5W, 5W, 10W, 20W, and BYPASS (used for 4 Ω operation).
2. This rotary control selects the constant voltage distributed system in which the speaker is used. Choices are BYPASS (used for 4 Ω operation), 0(Off), 25V, 50V, 70V, and 100V.

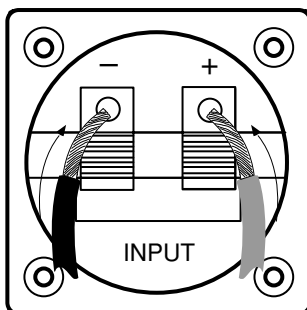
Note: Use a slot-head screwdriver to adjust the rotary controls.

3. Use these spring-loaded terminals to connect the speaker wiring.



Connections

The spring-loaded speaker terminals are designed to accept bare wire, up to a maximum of 18 gauge. Strip 1/4" of insulation off the end of the speaker wire, press in the tab, and insert the bare wire into the hole. When you release the tab, the wire is locked in place. Make sure there are no stray strands of wire outside the terminal connection.



Installation

The MONITOR MR3ST can be mounted using the optional mounting brackets. These include the following:

MA3-5	Articulated surface mount
MA3-6	U-bracket
MA-7B	Wall-mount support bracket

WARNING: Consult a professional rigger or structural engineer prior to suspending loudspeakers from a structure not intended for that use. Always know the working load limit of the structure supporting the loudspeaker array. Always make sure that the rigging hardware minimum rating is at least five times the actual load.



MR3STK/MR3SWTK

Specifications

System:

Freq. Range (-10 dB):
140Hz-21kHz

Freq. Response (-3 dB):
180Hz-19kHz

Horz. Coverage Angle (-6 dB):
110°, averaged 800Hz-16kHz

Vert. Coverage Angle (-6 dB):
110°, averaged 800Hz-16kHz

Directivity Factor Q (DI):
8.5 (9.3), averaged 800Hz-16kHz

System Sensitivity ¹:
89 dB, 1W@1m

Rated Maximum SPL:
108 dB @ 1 m (3.3 ft) peak

Rated Nominal Impedance:
4Ω (bypassed)

System Input Power Rating ²:
35W IEC, 140W Peak

Recommended Amplifier ³:
250W RMS

Constant Voltage:
25V, 50V, 70V, 100V

Power Taps:
1W, 2.5W, 5W, 10W, 20W

Crossover Frequency:
6.0kHz

Transducers:

Low Frequency:
4.75" (120 mm) carbon fiber woofer

High Frequency:
0.5" (13 mm) titanium metalized
dome tweeter, Ferrofluid cooled

Physical:

Enclosure:
45° back angles, high density polystyrene

Attachment Inserts:
4 integrated threaded insert points

Color: Matte black (MR3STK)
White (MR3SWT)

Grille: Matching perforated steel grille

Input Connectors:
Spring-loaded terminal

Dimensions HxWxD:
8.27 in x 5.91 in x 5.31 in
(210 mm x 150 mm x 135 mm)

Net Weight:
5.5 lb (2.5 kg)

Options:

MA3-5 (MA3-5W):
Articulated surface mount
Black (White)

MA3-6 (MA3-6W):
U-bracket
Black (White)

MA-7B (MA-7W)
Wall-mount support bracket
Black (White)

¹ Measured on-axis in the far field with 1 watt (2.00V RMS @ 4Ω) input and referenced to 1 meter distance using the inverse square law. Listed sound pressure represents an average from 300Hz to 3kHz.

² IEC Spectrum, peak for 2 hours with +4.5 dB crest factor.

³ Recommended amplifier is a power capability value that should be taken as a guide.



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